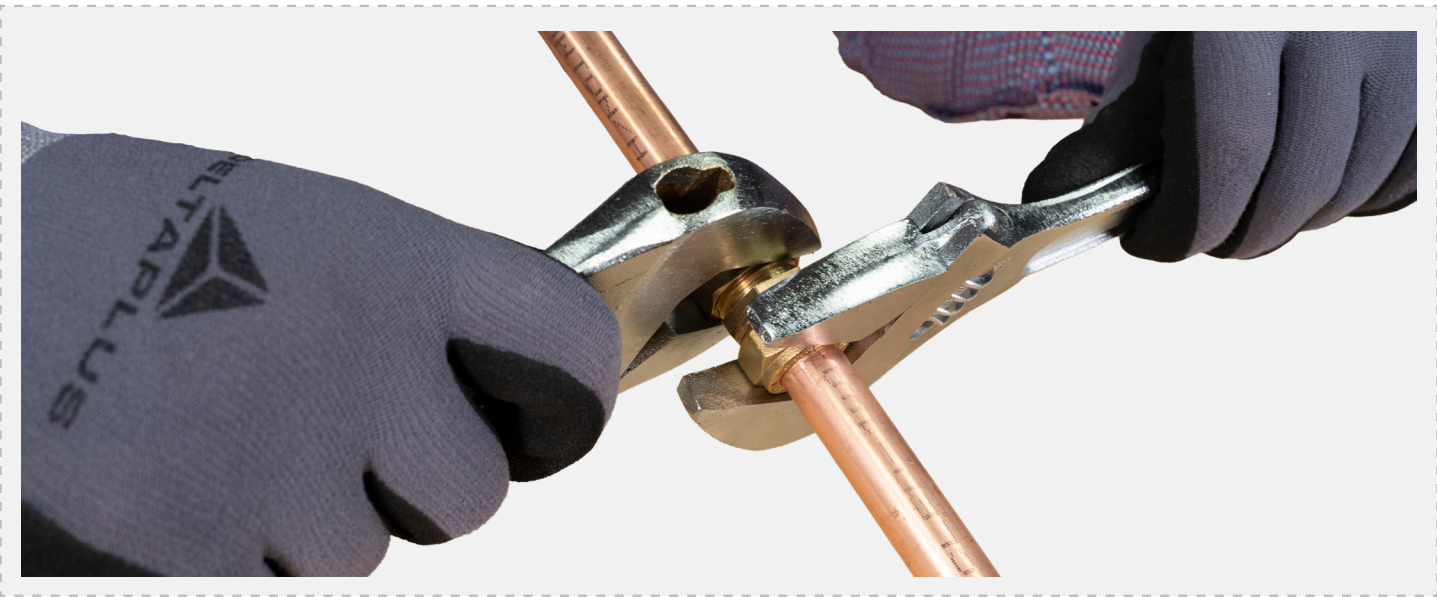


How to Install Lawton Compression Fittings

Installing compression fittings on copper tube.



Lawton Compression Fittings	Make a mechanical seal on copper tube. No heat or flux is used.
Standards	Fittings conform to BS EN 1254-2 and tube to BS EN 1057.
Further Detail	Characteristics not covered here are given in the relevant datasheet. The standards and the project specification take precedence over this guide.

Safety

- Cut and deburred tube throws metal slivers. Gloves must be worn when handling cut tube and swarf.
- The fitting shall be supported against the applied torque when tightening. A spanner that slips can cause injury.

These are general precautions. Site rules and any permit to work may differ and shall be followed.

Preliminary information

- The correct tube and fitting shall be selected.
- The sealing surfaces of the tube and fitting, including the threads, must be clean and free from damage or contamination.
- A light oil on the threads may be used on 35mm to 54mm fittings.

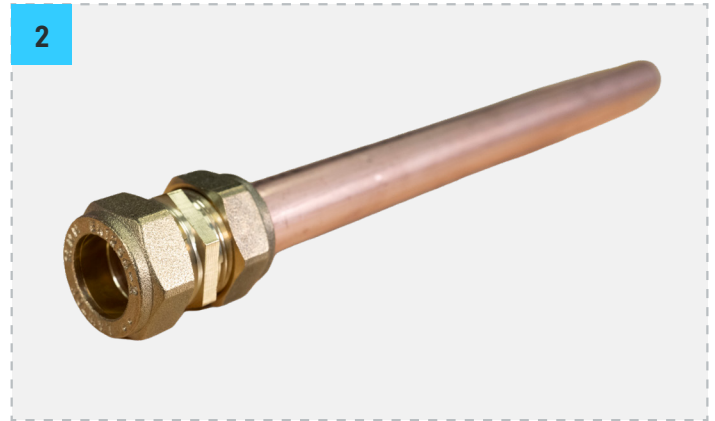
Assembly preparation

- Cut the tube square with a clean rotary cutter. If a saw is used, a clean fine-toothed blade shall be fitted.
- Remove all burrs with a fine-toothed file or a deburring tool.
- The tube must be clean, round and undamaged.

Assembling the fitting and tube



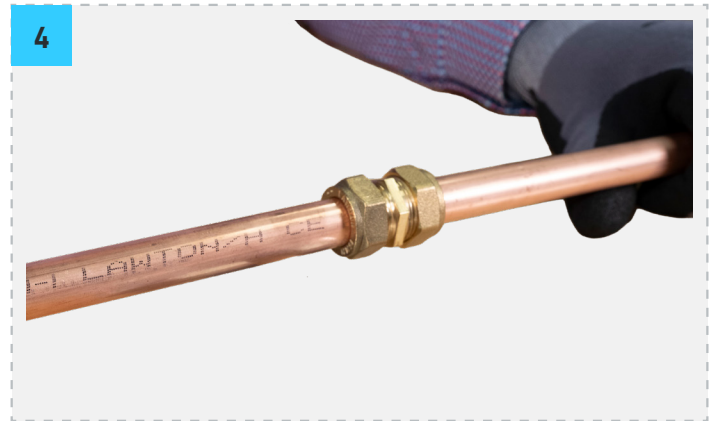
1. Remove the nut and olive from the fitting.



2. Put the nut and olive onto the tube.



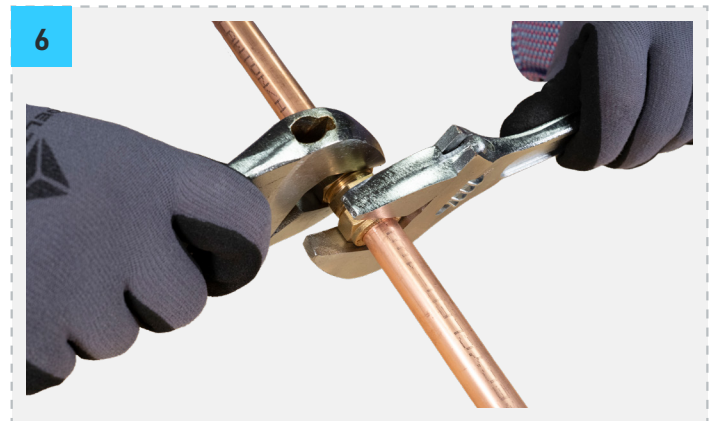
3. Insert the tube into the fitting, up to the tube stop.



4. Move the olive and nut down the tube to meet the threads of the fitting.



5. Hand tighten the nut onto the fitting.



6. Tighten the nut with a spanner, by the method given under Tightening below.

Tightening

The nut shall be tightened by one of the two methods below, but not both. The nut must not be overtightened.

- By turns: after hand-tightening, turn the nut 1 turn for 10mm to 28mm, or 3/4 turn for 35mm to 54mm.
- By torque: where a torque wrench is used, tighten to the figure in the table. Torque figures apply from 15mm; for 10mm and 12mm the turns method shall be used.

Tube size	Torque
15mm	40Nm
22mm	60Nm
28mm	80Nm
35mm	120Nm
42mm	180Nm
54mm	240Nm

Further installation details

- In rare cases a small weep can occur at the joint. Remove the nut and apply an approved jointing compound to the sealing face before re-tightening, or apply PTFE tape to the threads.
- The nut must not be overtightened. Contact us if in doubt.

For more details, please refer to our website or contact us by e-mail at technical@lawtontubes.co.uk